



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,450	02/13/2001	Mitsuhiro Ishii	088941/0186	9566

22428 7590 09/29/2004

FOLEY AND LARDNER  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER

LERNER, MARTIN

ART UNIT	PAPER NUMBER
----------	--------------

2654

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/781,450

**Applicant(s)**

ISHII, MITSUHIRO

**Examiner**

Martin Lerner

**Art Unit**

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 to 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 to 4 and 8 to 17 is/are rejected.
- 7) ☒ Claim(s) 5 to 7 and 18 to 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). The Specification, Page 3, Line 14 to Page 4, Line 23 refers to a conventional decoding synchronous control apparatus.

Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office Action to avoid abandonment of the application. The replacement sheet should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, Applicant will be notified and informed of any required corrective action in the next Office Action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 to 4 and 8 to 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Applicant's Admitted Prior Art* (Figure 2: Specification, Page 3, Line 14 to Page 4, Line 23) in view of *Herre* ('888).

Art Unit: 2654

Concerning independent claims 1, 2, 10, 11, 13, and 14, *Applicant's Admitted Prior Art* discloses a decoding synchronous control apparatus and method, comprising:

“a counter for counting up the time from the reference time data” – STC counters 1-1 to 1-n for receiving SCR data of channels 1 to n; each STC counter reproduces the reference time at the coding side by counting up the time in specified intervals from the relevant SCR (Page 3, Line 23 to Page 4, Line 1: Figure 2);

“a register for storing the reproduction time data” – reproduction time data registers 2-1 to 2-n for storing input PTS data of channels 1 to n (Page 4, Lines 2 to 3: Figure 2);

“a comparator for comparing a counter value of the counter and a register value of the register, so as to calculate a difference value of the values” – comparators 3-1 to 3-n for respectively comparing counter values of the STC counters 1-1 to 1-n with corresponding register values stored in the reproduction time registers 2-1 to 2-n (Page 4, Lines 3 to 5: Figure 2);

“a control section for performing synchronous control of the target channel based on the difference value calculated by the comparator and on status information for indicating the status of reproduction of the target channel” – decoding and display control section 104 for controlling the image decoding or image display of channels 1 to n based on difference values output from the comparators 3-1 to 3-n (Page 4, Lines 5 to 8: Figure 2).

Concerning independent claims 1, 2, 10, 11, 13, and 14, the only elements omitted by *Applicant's Admitted Prior Art* are “a selecting section for selecting each of

Art Unit: 2654

the first to  $n$ th channels as a target channel for synchronous control in turn at predetermined intervals” and “wherein synchronous control of each channel is performed in time-division form”. However, *Herre* ('888) teaches an analogous art apparatus and method for decoding audio signals for a plurality of channels 0 to  $n - 1$ , where an input signal given by a series of index values  $i(b,0)$  to  $i(b, n - 1)$  are brought into a serial order by rotating switch 53. The decoder advantageously performs the processing of the index values  $i(b,0)$  to  $i(b, n - 1)$  in order of increasing or decreasing frequency, or in an alternative manner, e.g. non-monotonic orderings in a manner consistent with an encoder. Also, only a subset of the index values  $i(b,0)$  to  $i(b, n - 1)$  (rather than all “ $n$ ” of them) may be provided to a decoder. (Column 8, Line 45 to Column 9, Line 25; Figures 2 and 5) Thus, rotating switch 53 selects each of the channels in a time-division form as a target channel in turn at predetermined intervals. The advantage is obtaining a switching technique for reduced complexity and less complicated structure, where each channel can be processed with a different encoding/decoding strategy. (Column 2, Line 63 to Column 3, Line 2) It would have been obvious to one having ordinary skill in the art to provide a selecting section for selecting each of first to  $n$ th channels as a target channel in turn at predetermined intervals in a time-division form as taught by *Herre* ('888) in *Applicant's Admitted Prior Art* for the purpose of providing a switching technique for reducing complexity and simplifying structure.

Concerning claims 3, 12, and 15, *Applicant's Admitted Prior Art* further discloses a decoding synchronous control apparatus and method, comprising:

“a counter for counting up the time from the reference time data” – STC counters 1-1 to 1-n for receiving SCR data of channels 1 to n; each STC counter reproduces the reference time at the coding side by counting up the time in specified intervals from the relevant SCR (Page 3, Line 23 to Page 4, Line 1: Figure 2);

“a register for storing the reproduction time data” – reproduction time data registers 2-1 to 2-n for storing input PTS data of channels 1 to n (Page 4, Lines 2 to 3: Figure 2);

“a comparator for comparing a counter value of the counter and a register value of the register, so as to calculate a difference value of the values” – comparators 3-1 to 3-n for respectively comparing counter values of the STC counters 1-1 to 1-n with corresponding register values stored in the reproduction time registers 2-1 to 2-n (Page 4, Lines 3 to 5: Figure 2);

“a control section for performing synchronous control of the target channel based on the difference value calculated by the comparator and on status information for indicating the status of reproduction of the target channel” – decoding and display control section 104 for controlling the image decoding or image display of channels 1 to n based on difference values output from the comparators 3-1 to 3-n (Page 4, Lines 5 to 8: Figure 2).

Concerning claim 4, *Herre ('888)* discloses a decoder can perform processing of index values  $i(b,0)$  to  $i(b, n - 1)$  in order executed according to evaluation of additional

side information which has been transmitted by a corresponding encoder ("based on information about bits streams of the first to nth channels")(column 9, lines 18 to 23).

Concerning claim 8, *Applicant's Admitted Prior Art* receives and detects reference time data and reproduction time data in a bit stream by STC counters 1-1 to 1-n and reproduction time data registers 2-1 to 2-n, respectively (Figure 2).

Concerning claims 9, 16, and 17, *Applicant's Admitted Prior Art* further discloses synchronous control of channels 1<sup>st</sup> time data to n<sup>th</sup> time data is performed by decoding and display control section 104 based on difference values for decoding control or reproduction time (Page 3, Lines 14 to 20; Page 4, Lines 5 to 8: Figure 2).

#### ***Allowable Subject Matter***

4. Claims 5 to 7 and 18 to 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

Herre et al., ("Continuously signal-adaptive filterbank for high-quality perceptual audio coding"), Johnston et al., Obikane, Matsumoto et al., Mori et al., Swanson, Veltman, Lankford, Morishita, Haskell et al., Tsukagoshi, Fujinami, and Suzuki disclose related art.

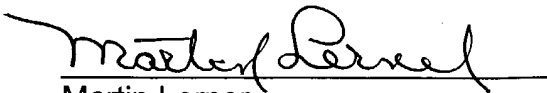
Art Unit: 2654

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin Lerner whose telephone number is (703) 308-9064. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (703) 305-9645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ML  
9/20/04

  
Martin Lerner  
Examiner  
Group Art Unit 2654